Candidate for Executive Committee

Yiran Chen
Duke University, Durham, NC, USA

BIOGRAPHY

Academic Background:
Ph.D., Purdue University, 2005, Electrical and Computer Engineering.

Professional Experience:
Associate Professor, Duke University, Durham, NC, 2017 – Present;
Associate Professor, University of Pittsburgh, PA, 2010 – 2016;
Staff Engineer, Seagate Technology LLC., Minneapolis, MN, 2007 – 2010.

Professional Interest:
Neuromorphic computing; Machine learning and deep learning; Emerging memory and storage; Mobile and edge computing.

ACM Activities:
Education Chair, SIGDA, 2016 – Present;
Associate Editor: ACM TCPS, 2017–Present; ACM JETC, 2012–Present;
Member, SIGDA, 2012 – Present;
Associate Editor, ACM SIGDA E-News, 2013 – 2016.

Membership and Offices in Related Organizations:
IEEE, 2005 – Present.

Awards Received:
Fellow of IEEE, 2018;
ACM SIGDA Service Award, 2016;
ACM SIGDA Outstanding New Faculty Award, 2014;
NSF CAREER Award, 2012.

STATEMENT

I am honored to be nominated as a candidate for the executive committee (EC) of SIGDA for 2018-2021. In the past three years, I have served on the EC of SIGDA as education chair, coordinating all the educational activities of SIGDA, such as: Ph.D./Student research forums at DAC, DATE, and ASPDAC; DA summer school; university research demonstration; CADAtholon; student research competition; early career workshop; SIGDA E-News; SIGDA Live Webinar, etc., with diligent support from the event volunteers. I also facilitated the ACM SIGDA global educational partnership for Cadence, which is the first such partnership in EDA society.

The footprint and influence of SIGDA has branched out from conventional EDA industry to many emerging industrial sectors all over the world. SIGDA, or EDA society at large, is facing dynamic changes in the core technologies it is rooted in and the communities it serves. I will devote myself to promoting the global impact of SIGDA and listening to the voices of our members. I will also work with the whole society to vitalize EDA technologies by encouraging engagement with emerging applications and industries, the excellence of community services, and the education of young generations and underrepresented groups.

Candidate for Executive Committee

Masanori Hashimoto
Osaka University, Suita, Osaka, Japan

BIOGRAPHY

Academic Background:
Ph.D., Kyoto University, 2001, Communications and Computer Engineering.

Professional Experience:
Professor, Osaka University, Suita, Osaka, Japan, 2016 – Present;
Associate Professor, Osaka University, Suita, Osaka, Japan, 2004 – 2016;
Research Associate, Kyoto University, Kyoto, Japan, 2001 – 2004.

Professional Interest:
Ultra Low Power Design; Design for Reliability; Timing and Power Integrity Analysis; Reconfigurable Computing; Sensor Network Applications.

ACM Activities:
Associate Editor, TODAES, SIGDA, 2017 – Present;
Program Committee Vice-Chair, ASP-DAC 2019, SIGDA, 2019;
Steering Committee Member, ASP-DAC, SIGDA, 2016 – Present;
Publication Chair, ISLPED 2011, SIGDA, 2011.

Membership and Offices in Related Organizations:
Board of Governors, IEEE Council on EDA (CEDA), 2016 – Present;
Associate Editor, IEEE Transactions on VLSI Systems, 2015 – Present;
Associate Editors-in-Chief, IPSJ Transactions on System LSI Design Methodology, 2013 – 2017.

Awards Received:
Best Paper Award, IEICE Transactions, 2016;
Special Feature Award, University LSI Design Contest at ASP-DAC, 2008;
Best Paper Award, ASP-DAC 2004;
Ericsson Young Scientist Award, 2002.

STATEMENT

I am honored to be nominated for the Executive Committee of SIGDA. SIGDA and SIGDA sponsored conferences have greatly supported my career and professional activities. I have been an active member of SIGDA, first as a technical committee member of various SIGDA sponsored conferences including DAC and ICCAD and then as associate editor of TODAES.

If elected, I would like to further contribute to SIGDA more directly by focusing on the following two points:

(1) Establishing connections with diverse communities surrounding the SIGDA community. Recent technology innovations arise at the boundaries of multiple communities which increases the number of cross-layer projects. These connections to neighbors and beyond are helpful in furthering EDA expansion.

(2) Improving the global presence of SIGDA and encouraging local activities. Sponsorship and support for conferences and events held outside the US are expected to help expand the visibility of SIGDA and encourage more people from the EDA community to get involved with SIGDA.

Candidate for Executive Committee

Joerg Henkel
Karlsruhe Institute of Technology (KIT), Germany

BIOGRAPHY

Academic Background:
Ph.D. in EE TU Braunschweig, 1996, Hardware/Software Co-Design.

Professional Experience:
Professor, KIT Karlsruhe, Germany, 2004 – Present;
Senior Research Staff Member, NEC Laboratories America, Princeton, NJ, 1997 – 2004;
Research Assistant, TU Braunschweig, Germany, 1990 – 1996.

Professional Interest:
Hardware/Software Co-Design; Low Power Design; Design for Dependability, Computer Architecture.

ACM Activities:
Editor-in-Chief ACM TECS, ACM SIGBED, 2011 – 2013;
Editor-in-Chief ACM TECS, ACM SIGBED, 2008 – 2010.

Membership and Offices in Related Organizations:
Editor-in-Chief IEEE D&T, IEEE CEDA, 2016 – Present.

Awards Received:
IEEE Fellow, 2015;
ACM/IEEE Best Paper Award ESWeek, Codes+ISSS, 2015;
ACM/IEEE Best Paper Award ESWeek, Codes+ISSS, 2014;
ACM/IEEE William J. McCalla Best Paper Award ICCAD, 2009.

STATEMENT

I would like to bring my manyfold experience (Editor-in-Chief in ACM and IEEE, General Chair of major ACM sponsored Conferences etc) to ACM SIGDA where I look forward to serve.

Candidate for Executive Committee

Xiaobo Sharon Hu
University of Notre Dame, IN, USA

BIOGRAPHY

Academic Background:
Ph.D., Purdue University, 1989, Electrical Engineering.

Professional Experience:
Professor, University of Notre Dame, IN, 2008 – Present;
Associate Professor, University of Notre Dame, IN, 2000 – 2008;
Assistant Professor, University of Notre Dame, IN, 1996 – 2000.

Professional Interest:
Design and analysis of embedded and real-time systems; Power, temperature and reliability aware system-level design; Circuit and architecture design for beyond-CMOS Devices; Algorithm and hardware co-design for medical applications; Computer-aided design of VLSI circuits and systems.

ACM Activities:
Vice-Chair and Conference Chair, SIGDA, 2015 – Present;
Secretary-Treasurer, SIGBED, 2011 – 2013;
General Chair, ACM/IEEE Design Automation Conference, 2017 – 2018;
Associate Editor, ACM Transactions on Cyber-Physical Systems, 2016 – Present.

Membership and Offices in Related Organizations:
Member of the IEEE Fellow Selection Committee, IEEE Council of Electronic Design Automation, 2017;
Member of the Executive Committee, IEEE Technical Committee on Cyber-Physical Systems, 2017 – Present;
Member of the Executive Committee, IEEE Technical Committee on Real-Time Systems, 2013 – 2015.

Awards Received:
Fellow of IEEE, 2016;
Certificate of Recognition of Service Award, Chair, CODES '02: 10th International Symposium on Hardware/Software Codesign, 2002;
Best Paper Award, ACM/IEEE Design Automation Conference, 2001.

STATEMENT

I have been an active member of the design automation community (DA) for more than 20 years. I worked in industry for four years and have been teaching for more than 20 years. Through these experiences and having served as the Vice/Conference Chair on SIGDA's EC in the last several

years, I have gained not only valuable experience in SIGDA related affairs but also deep appreciation in the important role that SIGDA can play in our community.

The DA field has faced unique challenges and opportunities in recent years. From the slowdown of the scaling trends of the CMOS technology to the rapid growth of IoT, the DA community needs to collectively work on growing its influence in this changing environment. It would be my pleasure to apply my experiences to serve the SIGDA community towards this goal. I will especially aim to make SIGDA play a more important role in organizing/supporting activities to promote research and education in emerging areas. I will also devote my effort to further raise the international reputation of our community and broaden participation from all groups and levels of researchers and practitioners.

Candidate for Executive Committee

Iris Hui-Ru Jiang
National Taiwan University, Taipei, Taiwan

BIOGRAPHY

Academic Background:
Ph.D., National Chiao Tung University, Hsinchu, Taiwan, 2002, Electronics.

Professional Experience:
Professor, National Taiwan University, Taipei, Taiwan, 2017 – Present;
Joint Professor, National Chiao Tung University, Hsinchu, Taiwan, 2017 – Present;
Visiting Scholar, IBM Research, Austin, TX, 2013 – 2014.

Professional Interest:
Timing analysis and optimization; Engineering change order; Physical design optimization; Design for manufacturability; Data analytics based EDA.

ACM Activities:
Chair/co-chair, CADathlon@ICCAD, 2016 – Present;
Publication chair, The International Symposium on Low Power Electronics and Design (ISLPED), 2017;
Technical program committee, Design Automation Conference (DAC), 2017 – Present;
Technical program committee, International Conference on Computer-Aided Design (ICCAD), 2013 – 2015.

Membership and Offices in Related Organizations:
Associate Editor, IEEE Transactions on Computer-Aided Design (TCAD), 2016 – Present;
Chair, IEEE CEDA DATC (Technical Committee of Design Automation), 2016 – Present;
Chair/co-chair, CAD contest at ICCAD, 2012 – 2014.

Awards Received:
1st place, ACM TAU Timing Analysis Contest (winners since 2013), 2017;
1st place award, IEEE CEDA CAD Contest at ICCAD, 2012;
Best Paper Nominee, ACM/EDAC/IEEE Design Automation Conference (DAC), 2016;
Outstanding Young Electrical Engineer, Chinese Institute of Electrical Engineering, 2011.

STATEMENT

SIGDA has served the EDA community very well in many aspects, particularly in organizing and sponsoring high quality conferences and educational events. If elected as an executive committee member of SIGDA, I'd like to augment SIGDA through two initiatives:

1. Increase the diversity of SIGDA members by attracting minorities to join SIGDA and provide mutual help. My plan would be to initiate a women’s chapter.

2. Promote SIGDA by holding regional events to enhance their impact and save travel costs. My plan would be to set up regional CADathlon contests and/or regional DA schools.

Candidate for Executive Committee

Hai (Helen) Li
Duke University, Durham, NC, USA

BIOGRAPHY

Academic Background:
Ph.D., Purdue University, 2004, Electrical & Computer Engineering.

Professional Experience:
Associate Professor, Duke University, Durham, NC, 2017 – Present;
Associate Professor, University of Pittsburgh, PA, 2015 – 2016;
Assistant Professor, University of Pittsburgh, PA, 2012 – 2015.

Professional Interest:
Brain-inspired computing systems, neuromorphic design; Memory architecture based on conventional & emerging technology; Hardware-software co-design for machine learning acceleration; Device/circuit/architecture co-design for low power systems.

ACM Activities:
Distinguished Member 2017, Lifetime Member, ACM, 2009 – Present;
Distinguished Speaker of ACM, 2017;
SIGDA Member, 2012 – Present;
Associate Editor, TODAES, 2014 – Present.

Membership and Offices in Related Organizations:
Member, IEEE, 2005 – Present.

Awards Received:
Best Paper Award of IEEE/ACM ASPDAC, 2017;
IEEE Senior Member, 2016;
DARPA Young Faculty Award, 2013.

STATEMENT

I am honored to be nominated as a candidate for the executive committee (EC) of SIGDA for 2018-2021. In the past, I have been actively involved in the educational activities of SIGDA, serving as the program chair/chair for Ph.D./Student research forums at DAC and DA summer school, reviewer for student research competition, as well as associate editor for ACM TODAES. Technical dissemination and cooperation among scientists and engineers are essential ingredients for continuous scientific innovation and advancement.

If elected, I will continue supporting and promoting SIGDA activities to all levels of electronic design automation professionals and students. I will also aim to increase the attractiveness of our group to younger generations by enhancing existing activities sponsored by SIGDA as well as establishing specific contexts devoted to them. My primary focus will be to better serve the SIGDA members and to meet their diverse needs.

Candidate for Executive Committee

Frank Liu
IBM Research, Austin, TX, USA

BIOGRAPHY

Academic Background:
Ph.D., Carnegie Mellon University, 1999, Electrical and Computer Engineering.

Professional Experience:
Research Staff Member, IBM Research, Austin, TX, 2000 – Present;
Advisory Engineering, IBM Server Group, Austin, TX, 1999 – 2000.

Professional Interest:
VLSI Design for Manufacturability; VLSI simulation and analysis; Cyber-Physical Systems; Machine Learning.

ACM Activities:
Executive Committee member, SIGDA, 2015 – Present;
Executive Committee member, SIGDA, 2012 – 2014.

Membership and Offices in Related Organizations:
Member, IEEE, 1999 – Present;
Member, AAAI, 2017 – Present.

Awards Received:
IEEE Fellow, 2017;
IEEE Council on EDA Outstanding Service Award, 2017;
IEEE Donald O. Pederson Award, 2013;
ACM SIGDA Leadership Award, 2007 & 2011;

STATEMENT

With the end of Moore's Law and the rise of artificial intelligence, the paradigm of computing is undergoing a fundamental change. I believe that this transition is a good opportunity for the design automation community: the new computing workloads will be carried out by future VLSI systems, and design automation is crucial to ensure their optimal performance-power trade-off. As the SIG representing this vibrant community, SIGDA should actively adapt to the changing landscape to better serve its members. More specifically, I believe SIGDA should further strengthen the existing educational programs, such as Ph.D. Forum and Student Research Competition, and to utilize these venues to help both professional and student SIGDA members to understand and explore

the future research needs in the AI era. Furthermore, SIGDA should seek corporate support for these educational activities, not only from CAD companies such as Cadence Academy Network, but also from other AI companies. Thirdly, I believe SIGDA should keenly seek collaboration with other SIGs to jointly explore new horizons and new opportunities in the future AI. Lastly, I champion the establishment of a membership development committee to help the promotion of SIGDA members to higher grades.

Candidate for Executive Committee

Yung-Hsiang Lu
Purdue University, West Lafayette, IN, USA

BIOGRAPHY

Academic Background:
Ph.D., Stanford University, 2002, Electrical Engineering.

Professional Experience:
Professor, Purdue University, West Lafayette, IN, 2017 – Present;
Co-Founder, Scientific Adviser, Perceive Inc., West Lafayette, IN, 2015 – Present;
Associate Professor, Purdue University, West Lafayette, IN, 2008 – 2017.

Professional Interest:
Low-Power Systems; Machine Learning and Image Processing; Distributed Systems.

ACM Activities:
ACM Distinguished Speaker, 2013;
Vice Chair, SIGDA Low-Power Technical Committee, 2010 – 2012.

Membership and Offices in Related Organizations:
Organizing Committee, IEEE Rebooting Computing, 2013 – Present.

Awards Received:
ACM Distinguished Scientist, 2013.

STATEMENT

I have been studying low-power systems for nearly 20 years. I was the vice chair of SIGDA Low-Power Technical Committee in 2010-2012. I am the lead organizer of the International LowPower Image Recognition Challenge (LPIRC). Over a period of three years, the winners of LPIRC have made more than six times improvement in the energy efficiency for recognizing objects in images. LPIRC receives strong support from industry, including Nvidia, Xilinx, Facebook, and Google.

If I serve on the SIGDA Executive Committee, I will promote better integration and collaboration of design automation and machine learning/artificial intelligence. Machine learning/artificial intelligence is one of the greatest technological improvements in recent years. These are great opportunities for SIGDA. I will organize workshops, panels, special sessions in conferences, special issues in journals, and competitions.

I am a co-founder and the scientific adviser of a technology startup using video analytics to improve shoppers' experience. This company has already raised more than $1M. If I am a member of the SIGDA Executive Committee, I will encourage researchers and students to explore the commercial opportunities of their innovations, consider the real-world impact while conducting their research projects, and accelerate the adoption of their new technologies.

Candidate for Executive Committee

David Z. Pan
The University of Texas at Austin, TX, USA

BIOGRAPHY

Academic Background:
Ph.D., University of California, Los Angeles, 2000, Computer Science.

Professional Experience:
Engineering Foundation Professor, The University of Texas at Austin, TX, 2014 – Present;
Assistant/Associate/Full Professor, The University of Texas at Austin, TX, 2003 – 2014;
Research Staff Member, IBM T. J. Watson Research Center, Yorktown Heights, NY, 2000 – 2003.

Professional Interest:
VLSI CAD; Physical Design and Design for Manufacturability/Reliability; Hardware Security; CAD for Emerging Technologies; FPGA Design Automation and Acceleration.

ACM Activities:
Senior Associate Editor, ACM Transactions on Design Automation of Electronic Systems (TODAES), 2014 – Present;
TPC/General Chair, International Conference on Computer Aided Design (ICCAD), 2018 – 2019;
TPC Vice Chair/Chair, Asian and South Pacific Design Automation Conference (ASP-DAC), 2016 – 2017;
TPC/General Chair, International Symposium on Physical Design (ISPD), 2007 – 2008.

Membership and Offices in Related Organizations:
Fellow Evaluation Committee, IEEE Council on Electronic Design Automation (CEDA), 2017;
Chair, IEEE CANDE Committee, 2009 – 2010;
Associate Editor, IEEE TVLSI, 2007 – 2014.

Awards Received:
ACM/SIGDA Outstanding New Faculty Award, 2005;
DAC Top 10 Author in Fifth Decade, 2013;
SRC Technical Excellence Award, 2013;
IEEE Fellow, 2014.

STATEMENT

SIGDA has played a key role in my professional career. I have served in many SIGDA activities, from conference committees, to journal editorial board, and various committees. I view my role in the SIGDA EC as an opportunity to boost my serving at broader scopes, and to enhance the overall quality, visibility, and member benefits of SIGDA. If elected,

- I would like to increase the visibility of SIGDA, both inside and outside ACM. DA is an extremely important and highly interdisciplinary area. I plan to work with the Communications of ACM and other venues to boost the overall DA coverage and SIGDA visibility, and highlight our members and research.

- I would like to enhance SIGDA outreach and member benefits, by boosting existing programs as well as creating new initiatives, and build strong pipelines of future DA professionals.

- I will work closely with various funding agencies, industry partners, and international organizations to improve the status and finance of SIGDA-sponsored activities.

- I will seek to have more open dialogues with our members, as I strongly believe that many new SIGDA initiatives and ideas will come from members directly. If elected, I look forward to creating such mechanisms between the SIGDA EC and members.

Candidate for Executive Committee

Sri Parameswaran
The University of New South Wales, Australia

BIOGRAPHY

Academic Background:
Ph.D., The University of Queensland, 1991, Computer Engineering.

Professional Experience:
Professor, The University of New South Wales, Australia, 2008 – Present;
Associate Professor, University of New South Wales, Australia, 2001 – 2007;
Lecturer/Senior Lecturer, University of Queensland, Australia, 1991 – 2001.

Professional Interest:
Embedded Systems; Low Power systems; Design Automation; Bioinformatics; Security.

ACM Activities:
Associate Editor, ACM TECS, SIGDA, 2011 – 2015;
Member, SIGDA, 2006 – Present.

Membership and Offices in Related Organizations:
Editor in Chief, IEEE Embedded Systems Letters, IEEE, 2016 – Present;
General Chair, International Conference on Computer Aided Design, ICCAD, 2017;
General Chair, Asia and South Pacific Design Automation Conference (ASP-DAC), 2012.

Awards Received:
ASP-DAC Leadership Award, 2015;
Best Paper Award - VLSI Design Conference, 2013;
Certificate of Recognition of Service Award, Chair of ASP-DAC, 2012;
UNSW Faculty Teaching Excellence Award, 2005.

STATEMENT

I have had a deep interest in various aspects of design automation for over thirty years. During this time I have published widely on the topic of design automation and graduated over 30 doctoral candidates and about ten masters' candidates in the area. I am the current Editor in Chief of IEEE Embedded Systems Letters. I chaired the 2017 International Conference on Computer-Aided Design (ICCAD) as well as the 2012 Asia South Pacific Design Automation Conference (ASP-DAC).

The size of systems, the number of components within a single system, security, power consumption, and footprint are all going to continue to challenge the ingenuity of engineers. Effective solutions necessitate the utilization of Design Automation methods. The rapidly changing landscape in the area of design methods will require rapid dissemination of information and the education of potential engineers in the area of design automation.

SIGDA with its committed personnel has provided its members with an exceptional special interest group. I intend following on this tradition of excellence by helping SIGDA provide outstanding service to its core membership and its wider participants.

Candidate for Executive Committee

Qinru Qiu
Syracuse University, Syracuse, NY, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Southern California, 2001, Electrical Engineering.

Professional Experience:
Professor, Syracuse University, NY, 2015 – Present;
Associate Professor, Syracuse University, NY, 2011 – 2015;
Associate Professor, Binghamton University, NY, 2009 – 2011.

Professional Interest:
Neuromorphic and Cognitive Computing; High performance and energy efficient computing; Machine Learning.

ACM Activities:
Co-organizer of SIGDA Live, 2015 – Present;
Member, ACM, 2003 – Present;
Associate Editor of TODAES, SIGDA, 2011 – 2015;
Associate Editor of SIGDA eNewsletter, 2008 – 2011.

Membership and Offices in Related Organizations:
Member, IEEE, 1997 – Present.

Awards Received:
ACM SIGDA Distinguished Service Award, 2011.

STATEMENT

I have been a member of SIGDA for 15 years, and attending conferences such as DAC, ICCAD since I was a Ph.D. student. Throughout this time, I have enjoyed the events, activities, workshops, and tutorials carefully planned and organized by the SIGDA leadership committee. I would like to do my part and contribute to this community. My goal is to serve the SIGDA community, help to increase its size and impact. I do not have any specific position or role in my mind. I will be happy to work with others on any tasks that need to be taken care of.

Candidate for Executive Committee

Takashi Sato
Kyoto University, Japan

BIOGRAPHY

Academic Background:
Ph.D., Kyoto University, 2004, Informatics.

Professional Experience:
Professor, Graduate School of Informatics, Kyoto University, Japan, 2009 – Present;
Professor, Integrated Research Institute, Tokyo Institute of Technology, Japan, 2006 – 2009;
Senior Engineer, Renesas Technology Corp., Tokyo, Japan, 2003 – 2006.

Professional Interest:
Computer Aided Electronic Circuit Design; Hardware Reliability; Semiconductor Device Modeling and Simulation; Hardware Security; Variation Aware Design Methodology.

ACM Activities:
Member: ACM and SIGDA.

Membership and Offices in Related Organizations:
Member, IEEE, 1998 – Present;
Member, IEICE, 1994 – Present.

Awards Received:
Beatris Winner Award, ISSCC, 2000;
Best paper award, ISQED, 2003;
Best paper award candidate, DAC, 2012.

STATEMENT

My goal if elected as an EC member is to foster SIGDA to make it even more lively and energetic. In order to pursue this goal, I would like to:

1) promote education for young people,
2) help advance scientific knowledge, and
3) provide more chances to bridge practice and theory;

All of which are important since I believe the research field of design automation has been and will be raised in the environments in which the mixture of people in academia and industry, young and experienced, are collaborating with. More specifically, for the prosperity of the field

of design automation, I think supporting interactive events are important. I would like to encourage attendance of young professionals and students, particularly from the Asia-pacific region, for the conferences and workshops of ACM, such as design automation conference or Asia-pacific design automation conference, both of which I am currently serving as a TPC member. I would also like to improve the visibility of the academic journal (TODAES) in the Asia-Pacific region to encourage more submissions. It is also important to conduct further outreach to the people working in both academia and industry to encourage communication through interactive/demonstration sessions in the ACM sponsored conferences.

Candidate for Executive Committee

Yiyu Shi
University of Notre Dame, IN, USA

BIOGRAPHY

Academic Background:
Ph.D., University of California, Los Angeles, 2009, Electrical Engineering.

Professional Experience:
Associate Professor, University of Notre Dame, IN, 2015 – Present;
Assistant Professor, Missouri University of Science and Technology, Rolla, MO, 2010 – 2015;
Site Associate Director, NSF I/UCRC Net-Centric Software and Systems Center, Rolla, MO, 2012 – 2015.

Professional Interest:
Embedded Artificial Intelligence; Sustainable Computing; Three-dimensional Integration; Hardware Security; Power and Signal Integrity.

ACM Activities:
General Chair, SIGDA Ph.D. Forum, 2016;
General Chair, ACM Student Research Competition at ICCAD, 2016;
Organizer, SIGDA Live/SIGDA Design Contest at DAC, 2016 – Present;
Associate Editor, SIGDA Newsletter, 2016 – Present.

Membership and Offices in Related Organizations:
Chair, IEEE St. Louis Section Rolla Subsection, 2013 – 2014;
Vice Chair, IEEE St. Louis Section Rolla Subsection, 2012 – 2013;
Secretary-Treasurer, IEEE St. Louis Section Rolla Subsection, 2011 – 2012.

Awards Received:
ACM SIGDA Outstanding Service Award, 2016;
IEEE Region 5 Outstanding Individual Achievement Award, 2015;
Academy of Science of St. Louis Innovation Award, 2015;
NSF Faculty Early Career Development Award, 2014.

STATEMENT

Over the past few years, I have served as an associate editor of the SIGDA Newsletter and JETC, as well as the chair of SIGDA Ph.D. Forum and ACM Student Research Competition at ICCAD. I also proudly initiated and chair two SIGDA events: SIGDA Live, a bi-monthly technical webinar attracting more than 50 attendees; and DAC Design contest, now in its second year

with a total of 138 participating teams from 12 countries/regions. By pursing the position of a SIGDA executive committee member, I have the vision to further enhance its impact, both laterally and longitudinally. First, SIGDA does not yet have a strong presence in Asia. This does not match the major EDA research activities on-going there. I want to promote SIGDA in the region by sponsoring various seminars, contests, workshops and/or conferences to address the need of local EDA communities, and to help them stay connected and informed. Second, the traditional EDA community is now rapidly expanding into emerging areas such as automobile, security, machine learning, etc. SIGDA can and should help EDA researchers, especially the young generation in fostering their growth in these areas. I plan to organize dedicated events towards this.

Candidate for Executive Committee

Aviral Shrivastava
Arizona State University, Tempe, AZ, USA

BIOGRAPHY

Academic Background:
Ph.D., University of California, Irvine, 2006, Information and Computer Science.

Professional Experience:
Associate Professor, Arizona State University, Tempe, AZ, 2012 – Present;
Visiting Faculty, University of California, Berkeley, CA, 2011 – 2013;
Assistant Professor, Arizona State University, Tempe, AZ, 2006 – 2012.

Professional Interest:
Compilers; Computer Architecture; Soft Error Mitigation; Cyber-Physical Systems; Accelerated Computing.

ACM Activities:
Program chair, CODES+ISSS, 2017 – 2018;
Associate Editor, ACM TECS, 2016 – Present;
Program chair, DAC Early Career Workshop, 2017 – 2018;
TPC member, ACM conferences, eg. CODES+ISSS, CASES, DAC, LCTES, 2006 – Present.

Awards Received:
Best student paper award, VLSI 2016;
Best paper candidate, ASP-DAC 2008.

STATEMENT

I believe SIGDA has a crucial role to play in promoting electronic design automation throughout the world. My whole career is built around electronic design automation. I became interested in this during the final years of my undergraduate studies and then continued to work in the industry, and research and teach in academia since then. My interest in serving on the SIGDA executive committee is coming from:

i) an innate and deep desire to give back to the community from which I have received so much, and
ii) invigorate and re-energize the SIGDA goals.

Even though SIGDA is doing an amazing job through the various conferences, travel grants, newsletters, webinars, etc.-- I feel much more can be done, especially in increasing

student, industry, and early faculty involvement. I see that a lot of early faculty in the area are still unaware of what SIGDA does and why. I have several ideas to change that by including organizing forums such as “What SIGDA can do for you?” at popular conferences, which will be targeted to all, (students, early professionals, and early faulty).

Candidate for Executive Committee

Sheldon Tan
University of California at Riverside, CA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Iowa, 1999, Computer Engineering.

Professional Experience:
Professor, University of California at Riverside, CA, 2010 – Present;
Associate Professor, University of California at Riverside, CA, 2006 – 2010;
Assistant Professor, University of California at Riverside, CA, 2002 – 2006.

Professional Interest:
VLSI long-term reliability, resilient system design; Parallel and GPU based and intelligent computing; Hardware security and trust computing; Thermal modeling, optimization and dynamic thermal management; Statistical modeling and optimization for VLSI systems.

ACM Activities:
Associate Editor, ACM Transactions on Design Automation of Electronic System, TODAES, 2015 – Present;
Member, ACM, 2002 – 2006, 2017 – Present;
Member, SIGDA, 2002 – Present;
Associate Editor, ACM Transactions on Design Automation of Electronic System, TODAES, 2009 – 2012.

Awards Received:
Best Paper Award, International Conference on ASIC, 2017;
Best Paper Award, International Conference on Computer Design 2007;
Best Paper Award, Design Auto Conference 1999.

STATEMENT

I would like to join the SIGDA executive committee to serve this community in a more active role. In the past, I also served as the associate editor for the ACM TODAES. I believe that SIGDA will be a better platform for me to serve the community as a member of the executive committee.

Specifically, I would like to be part of ACM-sponsored activities and sub-committees in the EDA conferences and journals and to be an active member of activities to promote EDA and related professional services. Second, I would like to work with many the ACM-sponsored conferences to create more special issues for Integration, the VLSI journal and TODAES, for fast

dissemination of the new and trendy research works in the community. Currently I have helped to organize the special issues for several conferences such as SMACD ’16, ASPDAC ‘17 and coming ASPDAC ‘18 in Integration. Third, I would like to build a local SIGDA chapter in UCR to promote ACM SIGDA and invite more students from UCR to join SIGDA. Fourth, I will help to organize more special sessions, workshops, and tutorials to promote some trendy topics in the ACM-sponsored conferences.

Candidate for Executive Committee

Baris Taskin
Drexel University, Philadelphia, PA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Pittsburgh, 2005, Electrical Engineering.

Professional Experience:
Professor, Drexel University, Philadelphia, PA, 2016 – Present;
Associate Professor, Drexel University, Philadelphia, PA, 2011 – 2016;
Assistant Professor, Drexel University, Philadelphia, PA, 2005 – 2011.

Professional Interest:
Electronic Design Automation (EDA) for VLSI; Low-power circuits and systems; Clock network synthesis; Networks-on-Chip (NoC) for Chip Multi-Processors (CMPs); Hardware/software design space exploration.

ACM Activities:
TPC Co-chair, ACM GLSVLSI, 2017 – 2018;
Steering committee member, ACM SLIP, 2017 – Present;
General chair, ACM SLIP, 2016 – 2017;
Academic coordinator, University Booth at DAC, 2008 – 2013.

Membership and Offices in Related Organizations:
IEEE CEDA Pennsylvania Chapter, Co-founder and chair, 2016 – Present;
Associate Editor, Microelectronics Journal, 2015 – Present;
Associate Editor, Journal of Circuits, Systems and Circuits, 2012 – Present.

Awards Received:
IEEE Philadelphia Section, Young engineering of the year, 2013;
ACM SIGDA, Distinguished service award, 2012;
NSF CAREER, 2009;
ACM SIGDA, A. Richard Newton graduate scholarship award, 2007.

STATEMENT

I ask for your support to serve on the SIGDA executive committee to accomplish the following goals:

- Keep SIGDA well-organized, communicative and adept at community representation.

- Continue and enhance my involvement to keep SIGDA supportive of colleagues and students, provide scholarly opportunities for career growth and recognize accomplishments commensurate with each individual's academic and professional standing.

- Continue the leadership of the executive committee in organizing internal affairs efficiently and enhance the direct benefits to the community (e.g. through conference sponsorship, travel awards, individual performance awards, newsletters, student competitions and presentation opportunities).

- Provide leadership to the SIG, reflecting the needs and demands of the community, including those specific to various geographies and groups.

Candidate for Executive Committee

Yu Wang
Tsinghua University, Beijing, China

BIOGRAPHY

Academic Background:
Ph.D., Tsinghua University, 2007, Electronic Engineering.

Professional Experience:
Associate Professor, Electronic Engineering Department, Tsinghua University, Beijing, China, 2007 – Present;
Vice Chair, Electronic Engineering Department, Tsinghua University, Beijing, China, 2013 – Present.

Professional Interest:
EDA; Hardware Computing; Brain Inspired Computing; FPGA; Neural Processor.

ACM Activities:
Track Chair, ACM Great Lakes Symposium on VLSI (GLSVLSI), 2018 – Present;
Co-Editor-in-Chief, ACM SIGDA E-Newsletter, 2016 – Present;
Technical Committee Member, ACM SIGDA FPGA, 2014 – Present;
Distinguished Speaker, ACM, 2015 – Present.

Membership and Offices in Related Organizations:
Senior Member, IEEE, 2015 – Present.

Awards Received:
ACM FPGA Best Paper award, 2017;
NVMSA Best Paper Award, 2017;
DAC Best Paper candidate, 2017;
Outstanding Youth Fund from Natural Science Fund of China, 2016.

STATEMENT

I am an active volunteer and entrepreneur in Asia and the South Pacific area in design automation, VLSI, and FPGA. I hope I can do more to help the researcher and Industry people to talk more and have a bigger social impact in DA.

I served as TPC chair for ISVLSI 2018, ICFPT 2011 and Finance Chair of ISLPED 2012 - 2016, Track Chair for DATE and GLSVLSI 2018, and served as program committee member for leading conferences, such as DAC, DATE, ICCAD, ASP-DAC, and FPGA and FPT. Currently I

serve as AE for TCAD and JCSC, and Special Issue Editor for the Microelectronics Journal. I have given over 50 invited talks in industry/academia.

I have received Best Paper Award in FPGA17, NVMSA17, ISVLSI12, and Best Poster Award in HEART12 with 8 Best Paper Nominations. I am a recipient of IBM X10 Faculty Award in 2010 and received The Natural Science Fund for Outstanding Youth Fund in 2016. I am the co-founder of Deephi Tech (valued over 150M USD), which is a leading deep learning processing platform provider.

Candidate for Executive Committee

Yuan Xie
University of California, Santa Barbara, (UCSB) CA, USA

BIOGRAPHY

Academic Background:
Ph.D., Princeton, 2002, Computer Engineering.

Professional Experience:
Professor, UCSB, Santa Barbara, CA, 2014 – Present;
Professor, Penn State University, State College, PA, 2003 – 2014;
Principle Researcher and Senior Manager, AMD, Beijing, China, 2012 – 2013.

Professional Interest:
Design automation; Computer architecture; VLSI design; Embedded system;
Low power and energy efficient design.

ACM Activities:
Award Chair, SIGDA, 2015 – Present;
Editor-in-Chief, ACM Journal on emerging technologies in computing systems (JETC), 2015 – Present;
ACM Distinguished Speaker, 2011 – 2017;
Senior Associate Editor, ACM Transactions on Design Automation of Electronic Systems (TODAES), 2013 – Present.

Membership and Offices in Related Organizations:
IEEE Fellow, IEEE, 2015 – Present;
Program Chair, IEEE HPCA conference, 2017 – 2018.

Awards Received:
ICCAD IEEE/ACM William J. McCalla ICCAD Best Paper Award, 2014;
IEEE Fellow, 2015;
NSF Career Award, 2006.

STATEMENT

SIGDA is committed to advancing the skills/knowledge of EDA professionals and students throughout the world. I will strive to uphold its high standards and build upon the existing strengths to continue the tradition of the prestigious reputation and high impact on the field. I have rich experience in various leadership roles related to SIGDA. For example, in addition to serving as the award chair in the current SIGDA EC, I am the editor-in-chief for ACM JETC

since 2015, and as general chair or TPC chair for various ACM conferences. My other advantage is that I have broad research areas related to SIGDA. My research areas span from VLSI design to system-level design, to architectural/system design exploration. Such broad research interests will help me expand the vision on the future of SIGDA, and attract broader audience and contributions beyond traditional CAD community. I also have rich industrial experience and strong industry connections (worked for both IBM and AMD before). Consequently, I have a good perspective of balancing different research topics and truly appreciate the need for advances in design and EDA, making the future SIGDA more industry relevant by integrating more perspectives/flavors from industry contributors.

Candidate for Executive Committee

Evangeline F.Y. Young
The Chinese University of Hong Kong

BIOGRAPHY

Academic Background:
Ph.D., University of Texas at Austin, 1999, Computer Science.

Professional Experience:
Professor, The Chinese University of Hong Kong, 2011 – Present;
Associate Professor, The Chinese University of Hong Kong, 2004 – 2011;
Assistant Professor, The Chinese University of Hong, Kong, 1999 – 2004.

Professional Interest:
VLSI CAD; Physical Design; DFM; Machine Learning; Optimization.

ACM Activities:
Associate Editor, ACM Transactions on Design Automation of Electronic Systems (TODAES), 2013 – Present;
Steering Committee Chair, The International Symposium on Physical Design (ACM ISPD), 2017;
General Chair, The International Symposium on Physical Design (ACM ISPD), 2016;
Organizing Committee, The International Symposium on Physical Design (ACM ISPD), 2013 – 2017.

Membership and Offices in Related Organizations:
Technical Activity Committee, IEEE CEDA, 2014 – Present;
Chair, IEEE CEDA Hong Kong Chapter, 2016 – 2017;
Associate Editor, IEEE TCAD, 2010 – 2015.

Awards Received:
ACM/IEEE William J. McCalla ICCAD Best Paper Award, 2017;
Best Paper Award from ACM ISPD, 2017;
Best Paper Award from ACM/IEEE SLIP, 2017;
Champion in CAD Contest at ICCAD, 2016.

STATEMENT

I am honored to be nominated to serve in the the SIGDA executive committee. I have experiences in leading and participating in related organizations. SIGDA has been playing an important role in promoting EDA for many years by actively organizing activities or sponsoring

conferences in related fields. I hope to take this opportunity to serve the community more through SIGDA to organize activities for education, research and development in EDA, addressing the needs of EDA students, researchers and engineers and encourage their participation in major events in design automation. In particular, a mission is to encourage more participation in EDA from females and from Asian countries.